

REMARKS

This Amendment, submitted in response to the non-final Office Action dated February 15, 2005, is believed to be fully responsive to the points of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 15-24 and 28-29 are pending. Claims 1-14 and 25-27 are cancelled above in response to the restriction requirement. Claims 15 and 16 are amended above. New claims 28 and 29 have been added, and support for the new claims can be found, for example in original claims 11 and 14. No new matter is added by the amendments.

Claim 15 has been rejected under 35 USC 102(e) over published US Patent Application No. 2003/0193987 (Zalameda). Claim 15 has also been rejected under 35 USC 103(a) over published US Patent Application No. 2002/0018510 (Murphy), in view of U.S. Patent No. 3,555,449 (Osial). The Examiner indicated that Claim 16-24 would be allowable if rewritten in independent form. Applicants respectfully submit the following remarks in support of the patentability of the claims.

Claim 15 has been amended to include certain of the additional recitations of original claim 16. As amended, Claim 15 is directed to an infrared ("IR") thermography imaging system including at least one lamp configured to heat a surface of an object to be imaged and at least one active quenching means configured to quench the at least one lamp. The active quenching means is configured to receive a control signal T2 and to quench the lamp in response to the control signal T2. An IR camera is configured to capture a number of IR image frames of the object.

Turning to the cited art, Zalameda is directed to a synchronized electronic shutter system for covering the lamps and detector. (Abstract). Zalameda does not teach or suggest actively quenching a lamp. Rather, Zalameda uses the shutter system to cover the lamps and detector. In particular, Zalameda does not teach or suggest active quenching means configured to receive a control signal T2 and to quench the lamp in response to the control signal T2, as recited by Claim 15.

Murphy is directed to the use of time-resolved infrared radiography (TRIR) in composite manufacture (Abstract) and does not teach or suggest actively quenching a lamp. In particular, Murphy is directed to TRIR using laser heating sources (page 1, paragraph 5) and teaches away from thermography techniques that use lamps (page, paragraphs 7 and 8; see also page 4, paragraphs 57 and 58, for example). As noted by the

Examiner, Murphy does not teach or suggest employing an actively quenched lamp. Osial is directed to a liquid cooled laser system and does not supply the above-described deficiencies of Murphy. In particular, the flash lamp cited by the Examiner is part of the laser (see for example element 42 in FIG. 1) and is not configured to heat a surface of an object to be imaged, as recited by Claim 15. Rather, the pump lamp is configured to excite laser rod 32, which is also part of the laser system (see FIG. 1). Further, Applicants do not understand how the water cooling of Osial relates to the active quenching recitation of Claim 15.

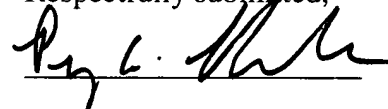
In view of the above, Applicants respectfully submit that Claims 15-24 and 28-29 are in condition for allowance.

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Please charge all applicable fees associated with the submittal of this Amendment and any other fees applicable to this application to the Assignee's Deposit Account No. 07-0868.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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